MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Permitting and Compliance Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

Williston Basin Interstate Pipeline Company
Hathaway Station
NE¼ of the SE¼ of Section 34, Township 7 North, Range 45 East in Custer County, Montana

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Semi-annual
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		As applicable
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #1628-03
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart GG
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)		X	
Major New Source Review (NSR)		X	
Prevention of Significant Deterioration (PSD)		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
State Implementation Plan (SIP)	X		General SIP

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original application submitted by Williston Basin Interstate Pipeline Company (WBI) on June 12, 1996, the significant modification application submitted by WBI on October 17, 2002, and the renewal application submitted by WBI on January 30, 2003.

B. Facility Location

WBI owns and operates a natural gas compressor station located in the Northeast ¼ of the Southeast ¼ of Section 34, Township 7 North, Range 45 East in Custer County, Montana. The facility is known as the Hathaway Compressor Station. Custer County is designated as an Unclassibiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The facility is located approximately 12 miles southwest of Miles City, Montana

C. Facility Background Information

Preconstruction Permit Background

On August 20, 1981, the Department of Environmental Quality (Department) received an application from Montana Dakota Utilities (MDU) for the operation of two 3,370-Horsepower (Hp) natural gas compressor engines to be located in Custer County, Montana. The permit application was assigned Permit **#1628-00**. Permit #1628-00 became final on October 17, 1981.

On November 23, 1992, the Department received a request from MDU and WBI to modify Permit #1628-00. The modification transferred the permit from MDU to WBI. Permit **#1628-01** became final on January 22, 1993. Permit #1628-01 replaced Permit #1628-00.

On February 26, 1993, the Department received a letter from WBI requesting a modification to Permit #1628-01. The modification correctly identified each of the two 3,730-Hp units as turbines rather than reciprocating engines. Permit **#1628-02** became final on May 7, 1993. Permit #1628-02 replaced Permit #1628-01.

On October 17, 2002, the Department received an application from WBI requesting an alteration to Permit #1628-02. The alteration replaced the existing 3,730-Hp Solar Centaur turbine (source #02) with a refurbished 3,730-Hp Solar Centaur turbine (new source #2). In addition, emission limits and testing requirements were added to the permit for the refurbished 3,730-Hp Solar Centaur turbine (source #2) per ARM 17.8.715, as well as the existing 3,370-Hp Solar Centaur turbine (Source #01) as requested by WBI. Further, the permit was updated to reflect current Department permit format and permit language. On December 18, 2002, Permit **#1628-03** replaced Permit #1628-02.

Title V Operating Permit Background

On June 12, 1996, the Department received an operating permit application for the Hathaway Station. The permit application was deemed administratively complete on July 12, 1996, and the application was deemed technically complete on August 12, 1996. Permit **#OP1628-00** became final and effective on September 9, 1998.

On February 4, 1999, the Department received a letter from WBI requesting an administrative amendment to Permit #OP1628-00. WBI requested that the Department remove the 40 CFR 60, Subpart GG, NO_x standard and corresponding compliance demonstration, recordkeeping and reporting requirements from the Title V permit. WBI stated that because construction commenced prior to October 3, 1982, the NO_x requirement is not applicable to the Hathaway Station. The Department agreed with WBI and performed an administrative amendment to correct the error. However, the permit number did not change in the permit; but, the permit was saved as Permit **#OP1628-01** in the Department's electronic files. Therefore, the next permit action will increase the permit number from Permit #OP1628-00 to Permit #OP1628-02. On February 10, 1999, Amended Permit **#OP1628-00** replaced Permit #OP1628-00.

D. Current Permit Action

On October 17, 2002, the Department received an application from WBI requesting an alteration to Preconstruction Permit #1628-02, as well as a modification to Permit #OP1628-00. WBI requested the Department to significantly modify Permit #OP1628-00 to include the changes at the facility that were incorporated into the Montana Air Quality Permit #1628-03. In addition, on January 30, 2003, the Department received a Title V Operating Permit Renewal Application from WBI. The application notified the Department that the only changes that have been made at the facility, since Permit #OP1628-00 was issued, were the changes requested in the significant modification application submitted on October 17, 2002.

The current permit action replaces an existing 3,730-Hp Solar Centaur turbine with a refurbished 3,730-Hp Solar Centaur turbine. In addition, emission limits and testing requirements were added to the permit for the refurbished 3,730-Hp Solar Centaur turbine (EU #02) per ARM 17.8.752, as well as the existing 3,370-Hp Solar Centaur turbine (EU #01) as requested by WBI. Further, the oil and diesel fuel tanks identified as EU3 in Permit #OP1628-00, were removed from the permit and added to the insignificant emitting unit list. The current permit is a result of the significant modification application of October 17, 2002, as well as the renewal application of January 29, 2003. Permit **#OP1628-02** replaces Permit #OP1628-00.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 105, MCA, the Department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications. The checklist was completed on March 27, 2003.

F. Compliance Designation

The WBI Hathaway Station was last inspected on July 16, 2002. During the inspection, the facility was in compliance with both applicable air quality permits (Preconstruction Permit #1628-02 and Title V Permit #OP1628-00). In addition, the Department reviewed records and reports for the facility since the last full compliance evaluation on June 24, 2002, and no problems or violations were found.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

WBI's Hathaway Compressor Station is a natural gas pipeline booster station that utilizes two natural gas turbines to drive compressors that boost the pressure in the natural gas pipeline to allow the transmission of natural gas. The Hathaway Compressor Station transmits natural gas either east to WBI's Cabin Creek Compressor Station or west to WBI's Hardin Compressor Station.

B. Emission Units and Pollution Control Device Identification

Emissions Unit I.D.	Description	Year Installed	Pollution Control Device
EU001	3,730-Hp Solar Centaur Turbine	1982	None
EU002	3,730-Hp Solar Centaur Turbine	Scheduled 2002-2003	None

C. Categorically Insignificant Sources/Activities

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by any applicable requirement other than a generally applicable requirement. The list of insignificant emitting units at the WBI facility are summarized in the following table.

Insignificant Emissions Unit I.D.	Description
IEU001	1.35 MMBtu/hr Eclipse Water Heater
IEU002	0.05 MMBtu/hr ITT Grinnel Space Heater
IEU003	0.016 MMBtu/hr Magic Chef Space Heater
IEU004	0.044 MMBtu/hr AO Smith Water Heater
IEU005	1,000 Gallon Slop Oil Tank
IEU006	300 Gallon Diesel Fuel Tank
IEU007	1,000 Gallon New Oil Tank
IEU008	Fugitive Emissions from Process Valves, Etc.
IEU009	In-plant Vehicle Traffic

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Each of the two 3,730-Hp Solar Centaur turbines is limited to 16.45 lb/hr for NO_x, 24.67 lb/hr for CO, and 8.22 lb/hr for VOC. The emission limits are based on Best Available Control Technology (BACT) determinations that were established by the Department. In addition, the natural gas is limited to a sulfur content of 0.8% by weight and an SO_2 content of 0.015 % by volume at 15% O_2.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor for all emission units. Furthermore, it does not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for a insignificant emission unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo **(i.e., no monitoring)** will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to monitor compliance with the emission limits and standards.

C. Test Methods and Procedures

Preconstruction Permit #1628-03 requires WBI to test each of the two 3,730-Hp Solar Centaur turbines for NO_x and CO, concurrently, to demonstrate compliance with the emission limitations in the permit. The permit demands that the tests be performed according to the EPA methods in Appendix A of 40 CFR 60. Compliance with the opacity, particulate from fuel combustion, sulfur compounds in fuel (gaseous), and VOC limitations in the permit may be demonstrated by burning pipeline quality natural gas on a continuous basis. In addition, WBI is required to complete an annual gas analysis to demonstrate that the sulfur content of the natural gas is less than 0.8% by weight and the SO_2 content of the natural gas is less than 0.015 % by volume at 15% O_2 on a dry basis.

This operating permit contains requirements for semi-annual testing with a portable analyzer for each of the two 3,730-Hp Solar Centaur turbines. The permit stipulates that the portable analyzer shall be capable of achieving performance specifications equivalent to the traditional test methods in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 022 for the "Determination of Nitric Oxide, Nitrogen Dioxide and NO_x from Stationary Sources by Electrochemical Analyzer." WBI may use another testing procedure as approved in advance by the Department. All compliance tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). WBI will then convert the NO_x and CO emissions

test results from a “ppm” value to a “lb/hr” number. Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A in order to monitor compliance with the emissions limitations in the permit.

The Department will use the portable analyzer testing results as a direct measure of compliance. The operating permit may not require testing for all sources if routine monitoring is used to monitor compliance, but the Department has the authority to require testing if deemed necessary to monitor compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to monitor compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of the generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Miles City Star* newspaper on or before April 16, 2003. The Department provided a 30-day public comment period on the draft operating permit from April 16, 2003, to May 16, 2003. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The The Department did not receive any comments during the public comment period.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response
The Department did not receive any comments during the public comment period.		

G. Permit Comments – Permit #1628-02

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
The Department did not receive any comments from WBI regarding the draft operating permit.		

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response
The Department did not receive any comments from EPA regarding the draft or proposed operating permits.		

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Section IV of the operating permit "Non-Applicable Requirements" contains the requirements that the Department determined were non-applicable. The following table summarizes the requirements that WBI identified as non-applicable and contains the reasons that the Department did not include these requirements as non-applicable in the permit.

Applicable Requirement	Reason Not Included in Permit
40 CFR 61, Subpart M National Emissions Standards for Hazardous Air Pollutants - Asbestos	This is a federal regulation that has specific procedural requirements that may become relevant to the major source during the permit term.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT/NESHAP Standards

National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (40 CFR Part 63, Subpart HH) and National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities (40 CFR Part 63, Subpart HHH) was promulgated June 17, 1999. As of the issuance date of Permit #OP1628-02, neither Subpart HH nor Subpart HHH is applicable to the facility because the facility does not meet the definition of a major source of hazardous air pollutants as defined in each subpart. However, the facility is potentially subject to 40 CFR Part 63, Subpart YYYY (Combustion Turbines), once the rules are promulgated.

B. NSPS Standards

As of the issuance date of Permit #OP1628-02, the Department is unaware of any future NSPS Standards that may be promulgated that will affect this facility.

C. Risk Management Plan

As of the issuance date of Permit #OP1628-02, this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.